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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/518,051	08/22/1995	STEPHEN D. RUSSELL	74023	8136

7590 01/09/2003

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[REDACTED] EXAMINER

MENGISTU, AMARE

[REDACTED] ART UNIT

[REDACTED] PAPER NUMBER

2673

DATE MAILED: 01/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No. <b>08/518,051</b>	Applicant(s) <b>Stephen D. Russell et al</b>
Examiner <b>First Last</b>	Art Unit <b>1234</b>



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1)  Responsive to communication(s) filed on Dec 3, 2002

2a)  This action is FINAL.      2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

4)  Claim(s) 12-17 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 16 and 17 is/are allowed.

6)  Claim(s) 12-15 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

1)  Notice of References Cited (PTO-892)

4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)

5)  Notice of Informal Patent Application (PTO-152)

3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_

6)  Other: \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 U.S.C. § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,4,12-15, are rejected under 35 U.S.C. 103(a) as being unpatentable over LIANG Yue (WO 94/08331) in view of Applicant's Admitted Prior Art and Johary et al (5,196,839).

As to claims 1,4,12-15, LIANG Yue (hereinafter LIANG) discloses a fault tolerant LCD , controller for controlling the gray scale on at least one pixel (Abstract;page 8, lines 25-28) of LCD region . LIANG did not disclose in detail the structure of the LCD. However, Applicant's Admitted Prior Art a STN liquid crystal display system (figs. 1-3, also see, page 8, the last 2 lines) comprising: a light source (22); a polarizer / an intensity homogenizing (16), a beam of incident light (22), a plurality of liquid crystal display regions coupled (14) to the polarizer; a plurality of pixels of the LCD region, each pixels having a collinear one to one correspondence with a pixel on an adjacent LCD region; an analyzer coupled to the polarizer and the pixel sequence to pass a gray-scale portion of the beam of polarized light transmitted from the pixel sequence as a function of polarized angle (page, 8, lines 6-23), a transparent substrates (12) ; and a drive circuit (18).

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Therefore it would have been obvious to one skill in the art at the time of the invention was made to have been motivated to combine the use of polarizer as taught by AAPA with a fault tolerant LCD of LIANG since this will provide a uniform brightness to the LCD system.

LIANG (as modified by Applicant's Admitted Prior Art) discloses a liquid crystal display with a gray scale control, but has failed to explicitly teach the gray scale control includes a programmable gray scale driver. Johary is cited to teach that it is well known for a gray scale display circuit to have a programmable gray scale generators (drivers) to provide gray scale at the display (see, Abstract, col.2, lines 35-46).

Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to have incorporated programmable gray-scale drives of Johary into the system of LIANG, since this will allow the LIANG device to have an advantage of automatically control the gray scale of a display in order to ensure simplicity and higher efficiency of adjustment operation without requiring operators.

***Allowable Subject Matter***

2. Claims 16 and 17 are allowed.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1,12-17 have been considered but are moot in view of the new ground(s) of rejection.

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4. Any inquiry concerning this communication should be directed to Amare Mengistu at telephone number (703) 305-4880.

5. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 308-9051, (for formal communications intended for entry)

**Or:**

(703) 308-6606 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).

A.M (h)

Art Unit 2673

January 8, 2002

  
Amare Mengistu  
Primary Examiner